BULLETIN No. 11.

DEPARTMENT OF AGRICULTURE.

TABULATED ANALYSES

OF

COMMERCIAL FERTILIZERS

FROM

SAMPLES SELECTED IN ACCORDANCE WITH ACT OF JUNE 28, 1879,

BY THE

Pennsylvania Department of Agriculture,

FROM JANUARY 1, 1896, TO AUGUST 1, 1896.

CLARENCE M. BUSCH,
STATE PRINTER OF PENNSYLVANIA.
1896.

DEPARTMENT OF AGRICULTURE
COMMONWEALTH OF PENNSYLVANIA

AN ACT

To regulate the manufacture and sale of commercial fertilizers.

Section 1. *Be it enacted, &c.*, That every package of commercial fertilizer sold, offered or exposed for sale for manurial purposes within this Commonwealth, shall have plainly stamped thereon the name of the manufacturer, the place of manufacture, the net weight of its contents, and an analysis stating the percentage therein contained of nitrogen, or its equivalent in ammonia, in an available form, of potash soluble in water, of soluble and reverted phosphoric acid, and of insoluble phosphoric acid: *Provided*, That any commercial fertilizer sold, offered or exposed for sale which shall contain none of the above named constituents shall be exempt from the provisions of this act.

Section 2. Every manufacturer or importer of commercial fertilizers as specified in section one of this act, shall on or before the first day of January, next ensuing, or before offering them for sale in this Commonwealth, file annually with the Secretary of the State Board of Agriculture, an affidavit showing the amount of said fertilizer sold within the Commonwealth during the last preceding year, and if the said amount shall be one hundred tons or less, he shall pay to the Treasurer of the State the sum of ten dollars for each and every article of such commercial fertilizer sold within the State during the last preceding year, and if the said amount shall exceed one hundred tons and be less than five hundred tons, he or they shall pay the sum of twenty dollars as aforesaid, and if the said amount shall be five hundred tons or more, he or they shall pay the sum of thirty dollars as aforesaid. If such manufacturer or manufacturers, importer or importers, shall not have made any sales within the Commonwealth during the preceding year, he or they shall pay the sum of ten dollars as aforesaid. Every such manufacturer shall at the same time file with the Secretary of the State Board of Agriculture, a copy of the analysis required by section one of this act, and shall then be entitled to receive from the Secretary of the State Board of Agriculture, a certificate showing that the provisions of this act have been complied with: *Provided*, That the certificates which have been issued for the year ending July thirty-first, one thousand eight hundred and ninety-five, are hereby extended until the thirty-first day of December, one thousand eight hundred and ninety-five. *(As amended by act, June 26, 1895.)*

Section 3. Any person selling, offering or exposing for sale any commercial fertilizer without the analysis required by section one of this act, or with an analysis stating that it contains a larger percentage of any or more of the above named constituents than is contained therein, or for the sale of which all the provisions of section two have not been complied with, shall be guilty of a misdemeanor, and on conviction, shall forfeit a sum not less than twenty-five and not exceeding one hundred dollars for the first offense, and not less than two hundred dollars for each subsequent offense, one-half of which shall be for the use of the informer, and the remainder for the county in which the conviction is secured: *Provided*, Said informer be the purchaser and goods be for his own use.

Section 4. It shall be the duty of the Board of Agriculture to analyze such specimens of commercial fertilizers as may be furnished by its agents, said samples to be accompanied with proper proof, under oath or affirmation, that they were fairly drawn; the fee for such analysis shall be determined by the executive committee of the Board, and be based upon a fixed rate for each determination, and shall in no case exceed seventy-five per centum of the usual price paid for such services, and shall be payable from the Treasury of the Commonwealth in the manner as now provided by law.

Section 5. That the money paid into the treasury under the provisions of this act shall constitute a special fund from which the cost of selecting samples, making analyses and other expenses incident to the carrying into effect the provisions of this act shall be paid: *Provided*, That the total amount thus expended shall in no case exceed the amount paid into the treasury. *(As amended by act, May 21, 1895.)*

Section 6. The term "commercial fertilizers," as used in this act, shall be taken to mean any and every substance imported, manufactured, prepared, or sold for fertilizing or manuring purposes, except barnyard manure, marl, lime, and wood ashes, and not exempt by the provisions of section one of this act.

Section 7. This act shall go into effect on and after the first day of August, one thousand eight hundred and seventy-nine.

OFFICE OF PENNSYLVANIA DEPARTMENT OF AGRICULTURE,

Harrisburg, Pa., January 1, 1896.

Dr. Frear, the Chemist of the Department, has submitted the following schedule of valuations, based upon the average wholesale prices of fertilizer ingredients in New York, from September 1, 1893, to May 1, 1894; in recommending the schedule, Dr. Frear thus alludes to the items which enter into the valuation of a fertilizer, and enumerates them as follows:

1. "The wholesale cost of the ingredients.

2. The jobbers' gross profits on the sale of the ingredients; this includes office expenses, advertising, losses, etc.; for the purpose of the present computation, it may be assumed that the sum of this gross profit and the wholesale cost of the ingredients is equivalent to the retail price of the single ingredients, near the wholesale market, in one ton lots of original packages, for cash.

3. The expense and profit of mixing. This item applies only to Complete fertilizers, Rock and potash, and Ammoniated rock, and not to Dissolved or Ground bone or Dissolved rock.

4. The expense and profit of bagging.

5. The agents' commissions; this item includes not only the commission proper, but every advance in price due to the sale of the goods through an agent in small quantities, on time, rather than directly to the consumer in ten tons lots for cash.

6. Freight from the wholesale market to the point of delivery."

The schedule of valuations as recommended by Dr. Frear, and as adopted by the Advisory Committee, is as follows:

	Cts. per lb.
Nitrogen in ammonia salts,	19
in nitrates,	14½
in dry and fine ground fish, meat and blood, and in mixed fertilizers,	18½
in cotton seed meal and castor pomace,	15
in fine bone and tankage,	12½
in fine-medium bone and tankage,	11
in medium bone and tankage,	9
in coarse bone and tankage,	5½
in hair, horn shavings and coarse fish scrap,	7
Phosphoric acid, soluble in water, in bone fertilizers,	6
soluble in water, in rock fertilizers,	4
soluble in ammonium citrate,* in bone fertilizers,	5½
soluble in ammonium citrate, in rock fertilizers,	3½
insoluble in ammonium citrate,	2

* Neutral solution of 1.09 sp. gr. using 100 c. c. for thirty minutes at 65° C.

	Cts. per lb.
Phosphoric acid in fine bone and tankage,	3½
in fine-medium bone and tankage,	3½
in medium bone and tankage,	2½
in coarse bone and tankage,	2
Phosphoric acid, in fine ground fish, cotton seed meal, castor pomace and wood ashes,	5
Potash in high grade sulphate and in forms free from muriate (or chloride),	5½
as muriate,	4½

Potash in excess of that equivalent to the chlorine present, will be valued as sulphate, and the remainder as muriate.

Nitrogen in mixed fertilizers will be valued as derived from the best sources of organic nitrogen, unless clear evidence to the contrary is obtained.

Phosphoric acid in mixed fertilizers is valued at bone phosphoric acid prices unless clearly found to be derived from rock phosphate.

Ground bone is sifted into four grades of the following fineness: Fine, less than one-fiftieth inch; fine-medium, less than one twenty-fifth inch; medium, less than one-twelfth inch, and coarse, over one-twelfth inch.

The result obtained by the use of these valuations does not cover the items of mixing, bagging, freight and agents' commissions. To cover these, allowances are made as follows:

For freight, an allowance of $2.00 per ton on all fertilizers.

For bagging, an allowance of $1.00 per ton on all fertilizers.

For mixing, an allowance of $1.00 per ton for complete fertilizers, and rock and potash goods.

For agents' commissions, an allowance of 20 per cent. is added to the cash value of the goods ready for shipment.

To illustrate the application of this valuation to South Carolina Rock, Dr. Frear furnishes the following calculation:

Phosphoric acid:

Soluble,	11.50	230 lbs. @ 4 cts. =		$9.20
Reverted,	2.50	50 lbs. @ 3½ cts. =		1.75
Insoluble,	1.00	20 lbs. @ 2 cts. =		0.40
Retail cash value of ingredients,				$11.35
Bagging,				1.00
Cash value of goods ready for shipment,				$12.35
Agents' commission, 20 per cent.,				2.47
Freight,				2.00
Commercial value per ton,				$16.82

In order to illustrate the differences between the valuations obtained by this schedule, that which was in force from 1888 to 1894, that used by the New England States and that of Maryland, Dr. Frear furnishes us with the following table:

	Complete fertilizers.	Rock and potash.	Dissolved animal bone.	Dissolved S. C. Rock.	Ground bone.
Number of samples included, ...	334	27	17	64	75
Average selling price, ...	$29 54	$21.22	$27.22	$16.98	$29.54
Valuation by the new schedule, . . .	$29.58	$18.26	$28.32	$17.32	$29.72
* By the former schedule, ...	$28.84	$18.95	$30.06	$23.13	$36.09
† By the New England schedule, . .	$20.98	$16.03	$20.93	$17.45	$28.92
* By the Maryland schedule, ...	$23.41	$17.20	$22.42	$17.88	$26.00

* Includes no allowance for freight or commission.
† Includes no allowance for mixing, bagging, freight or commission.

The valuation obtained by the use of these figures is not intended to show the relative agricultural value of the fertilizer; this depends upon the soil and crop to which the fertilizer is applied, as well as upon the kind and proportion of the ingredients used; the "Comparative Commercial Value per ton," is intended to show what it would cost to buy the ingredients in one ton lots and mix them at home, and it should, in no case, be confounded with the agricultural value of the fertilizer.

THOS. J. EDGE,
Secretary, &c.

NOTE ON 1896 VALUATIONS.

August 1st, 1896.

The above schedule of valuations was adopted in 1895, and it did not seem desirable early this year to make any changes in it. Since then, however, Dr. William Frear, the chemist of the Department, writes that sharp depressions have occurred in the wholesale market prices of certain materials, as follows:

Sulphate of ammonia, ... 20 per cent.
Dried blood and related materials, ... 12 per cent.
Fish guano, ... 15 per cent,
Phosphate rock, ... 50 per cent.
Acidulated phosphate rock, ... 20 per cent.

Slight reductions have also been made in certain potash salts. For this reason, the valuations made in accordance with the above schedule, upon highly nitrogenous, complete fertilizers, rock and potash, and acid phosphates will be considerably too high.

TABULATED ANALYSES OF COMMERCIAL FERTILIZERS.

From samples selected by the Secretary and Special Agents of the Pennsylvania Department of Agriculture. Analyses by DR. WILLIAM FREAR, *Chemist of the Department, and of the State College Experiment Station, State College, Pa.*

Samples Selected from January 1, 1896, to August 1, 1896.

COMPLETE FERTILIZERS.

Containing Phosphoric Acid, Potash and Nitrogen.

Sample number.	Name and Address of Manufacturer.	Name of Fertilizer.	Where Selected.	Moisture.	Soluble phosphoric acid.	Reverted phosphoric acid.	Insoluble phosphoric acid.	Potash.	Nitrogen.	Comparative commercial value per ton.	Selling price at point of selection per ton.	Sample number.
338	Allegheny City Fert. Works, Allegheny, Pa.,	Pure Potato Manure, ...	Allegheny, ...	9.08	3.92	3.43	1.66	2.73	4.32	$37 44	$35 00	338
339	" " " "	Odorless Special Lawn Fert.,	Allegheny, ...	4.36	0.22	5.07	10.33	3.18	2.07	28 89	40 00	339
341	" " " "	Pure Raw Bone Phosphate,..	Allegheny, ...	6.05	5.47	7.30	1.40	1.75	3.41	39 55	32 00	341
295	A. Anstine, Stewartstown, Pa.,.....	Bone Phosphate for Potatoes.	Stewartstown, ...	8.92	6.46	1.52	1.72	8.49	2.32	35 95	28 00	295
296	" " "	Bone Phosphate,.....	Stewartsown.	10.16	7.72	2.31	1.92	2.05	1.65	29 06	24 00	296
1	American Incin. Co., Philadelphia, Pa.,...	Garbage Tankage,.....	Morristown, ...	3.65	0.26	1.00	1.76	0.25	2.12	16 70	12 00	1
141	American Reduction Co., Pittsburg, Pa...	Pouter Pigeon Fertilizer,.....	Springboro', ...	6.92	3.48	4.63	0.34	2.20	0.61	25 15	25 00.	141
283	J. A. Altland & Co., Davidsburg, Pa.,....	Ammoniated Bone Phosphate,	Stewartstown.	4.28	7.53	3.28	2.38	2.23	1.33	29 73	22 00	233

284	" " " "	Queen Phosphate.....	Stewartstown, ..	12.25	5.93	2.53	1.62	2.43	0.82	23 31	20 00	284
32	Armour Fertilizer Works, Chicago, Ill.,	All Soluble,.....	Brandamore, ...	3.41	2.51	5.15	7.27	4.00	3.41	38 67	28 00	32
324	" " " "	Ammoniated Bone & Potash,.	Pittsburg, ...	5.15	4.14	3.68	2.29	2.20	3.23	33 68	28 00	324
327	" " " "	Bone, Blood and Potash,.....	Pittsburg, ...	5.16	6.98	3.07	1.42	7.94	4.24	48 56	40 00	327
3		Ashes, Canada Wood,.....	Waverly, ...	14.20	.....	.....	0.92	2.34	.....	3 49	8.25	3
86	Baltimore Pulverizing Co., Baltimore, Md.	Farmers' Favorite Fertilizer,.	Hanover, ...	8.26	1.34	3.44	2.54	2.06	1.20	19 65	18 00	86
299	G. H. Bartenschlager, Stewartstown, Pa.,	Champion Bone Phosphate,....	Stewartstown, ...	10.10	4.05	6.13	2.94	1.87	1.13	26 86	24 00	299
48	Baugh & Sons Co., Philadelphia, Pa.,....	General Crop Grower,.....	Gettysburg, ...	11.27	7.30	1.60	2.16	1.32	1.12	24 34	21 00	48
49	" " " "	Double Eagle Phosphate,.....	Gettysburg, ...	12.41	8.00	1.86	2.33	.....	2.11	28 82	25 00	49
52	" " " "	Potato Fertilizer.	Gettysburg, ...	13.72	7.29	2.16	1.88	2.01	1.50	27 49	26 00	52
53	" " " "	Special Potato Manure,.....	Gettysburg, ...	8.83	5.01	1.93	2.28	10.05	2.01	35 19	33 00	53
78	" " " "	Export Bone with Potash,....	Hanover, ...	5.33	1.59	4.51	6.35	2.94	2.15	28 30	28 00	78
198	" " " "	Raw Bone Phosphate, etc.,...	Woodbine, ...	11.11	6.78	2.11	2.45	1.23	1.51	26 16	25 00	198
380	" " " "	High-Grade Potato Guano,....	Dover, ...	3.90	6.35	2.62	2.72	6.14	4.63	45 57	34 00	380
382	" " " "	Soluble Alkaline Super-Phos.,	Dover, ...	6.45	7.52	2.95	0.82	3.22	.....	17 97	16 00	382
126	The Berg Co., Philadelphia, Pa.,.....	Special $25 Bone Manure,.....	Lancaster, ...	6.55	4.84	2.83	5.43	2.46	2.30	30 61	25 00	126
128	" " "	Truckers' Joy Guano, ...	Lancaster.	9.37	4.51	2.72	3.27	5.33	5.10	44 50	45 00	128
140	U. & A. C. Blackburn, Fishertown, Pa.,	Corn and Potato Phosphate,...	Fishertown, ...	11.17	0.87	9.03	2.13	1.62	1.31	26 11	19 00	140
268	E. K. Bollinger & Co., Seitzland, Pa.,....	Rising Star Phosphate,.....	Seitzland, ...	9.05	9.47	2.98	2.08	0.82	0.60	26 50	17 00	268
384	" " " "	Ammoniated Bone Phosphate,	Mount Wolf, ...	6.55	7.41	3.13	1.66	1.16	0.90	25 26	24 00	384
27	Bowker Fert. Co., Boston and New York,	Farm and Garden Phosphate,	Danville, ...	8.77	3.51	5.21	4.26	2.26	1.66	28 14	33 00	27
28	" " " "	Sure Crop Phosphate,.....	Danville, ...	11.47	3.55	5.51	4.35	1.31	0.95	24 49	24 00	28
29	" " " "	Super-Phosphate with Potash,	Danville, ...	9.02	6.26	5.15	5.50	1.17	.....	18 62	18 50	29
30	" " " "	Stockbridge Man. for Potatoes,	Danville, ...	6.86	2.71	2.18	4.36	9.70	3.85	40 86	45 00	30
318	Bradley Fertilizer Co., Boston, Mass.,....	Potato Fertilizer,.....	Kittanning, ...	10.18	5.70	3.57	2.90	3.38	2.05	31 47	34 00	318

COMPLETE FERTILIZERS—Continued.

Sample number.	Name and Address of Manufacturer.	Name of Fertilizer.	Where Selected.	Moisture.	Soluble phosphoric acid.	Reverted phosphoric acid.	Insoluble phosphoric acid.	Potash.	Nitrogen.	Comparative commercial value per ton.	Selling price at point of selection per ton.	Sample number.
386	Horace Brillinger, Emigsville, Pa.,	Special Wheat, C. & G. Mix.,	Emigsville,	5.40	6.12	3.00	2.35	2.41	0.93	$25 09	$19 00	386
82	S. B. Brodbeck, Brodbecks, Pa.,	Reliable Phosphate,	Hanover,	11.47	8.18	2.06	0.78	2.10	0.75	24 88	19 00	82
304	" " "	Standard Amm't'd Phosphate,	New Freedom,	10.05	8.66	1.87	1.05	2.02	1.38	28 24	22 00	304
305	Brumfield & Foster, Colora, Md.,	Potato Phosphate,	New Freedom,	7.91	1.86	7.12	2.62	4.39	0.92	26 50	22 00	305
314	" " "	Acid Phosphate & Potash,	Porter's Station,	10.01	5.50	6.35	2.52	2.18	.....	18 60	18 00	314
315	" " "	Ammoniated Bone,	Porter's Station,	10.04	7.70	2.97	2.79	1.64	1.46	28 96	25 00	315
59	Chemical Co. of Canton, Baltimore, Md.,	Harrow Brand, Wheat Grower,	Littlestown,	11.49	6.96	2.86	1.29	1.46	0.59	23 04	19 00	59
92	" " " "	Potato Manure,	Hanover,	8.70	4.08	4.19	2.86	4.40	0.87	25 75	23 00	92
152	" " " "	Red Clover Brand,	Barnsley,	5.69	2.88	3.49	1.62	2.26	0.74	19 74	23 00	152
196	" " " "	Soluble Bone and Potash,	Castle Fin,	10.46	7.27	5.03	1.69	1.47	.....	18 00	16 00	196
79	E. A. Clendennin & Bro., Colora, Md.	Cereal Bone Phosphate,	Hanover,	13.94	9.73	8.02	2.08	2.85	1.01	24 57	24 00	79
81	" " " "	Farmers' Favorite Vegetator,	Hanover,	10.02	9.72	8.18	2.27	1.04	1.00	22 89	19 00	81
147	" " " "	Pure Dissolved Bone,	Barnsley,	6.13	10.36	4.16	0.38	.....	1.78	31 89	25 00	147
148	" " " "	Potato and Truck Compound,	Barnsley,	10.21	0.63	6.96	1.96	1.63	1.75	25 02	28 00	148
150	" " " "	Soluble Bone Phosphate,	Barnsley,	10.63	6.61	4.57	1.99	2.09	.....	17 79	14 00	150
332	Cleveland Dryer Co., Cleveland, O.,	Potato and Vegetable Fert.,	Pittsburg,	8.11	7.22	1.51	3.48	5.05	2.82	36 32	32 00	332
333	" " " "	Buckeye Super-Phosphate,	Pittsburg,	7.15	6.72	2.36	4.03	.....	1.92	26 34	30 00	333

162	Henry Cope & Co., Lincoln University, Pa.	Dead Shot Super-Phosphate,..	Nottingham, ...	6.46	2.58	5.34	3.57	2.78	0.94	24 16	24 00	162
171	" " " "	Sp'l Ches'r Co. Po. & C'n Phos.	Nottingham.	9.21	3.89	4.91	2.41	4.30	0.98	26 72	25 00	171
242	Josiah Cope & Co., Lincoln University, Pa.	Soluble Bone and Potash,....	Windsor, ...	8.62	9.25	5.39	1.29	1.68	.....	20 28	19 00	242
387	Crocker Fert. & Chem. Co., Buffalo, N. Y.,	Practical Ammoniated Phos.,	Emigsville, ...	3.10	0.98	6.82	5.38	1.42	1.11	23 85	20 00	387
388	" " " "	New Rival Amm. Phosphate,	Emigsville, ...	6.17	8.55	2.09	3.62	2.13	1.28	29 31	24 00	388
293	Louis F. Detrick, Baltimore, Md.....	Kangaroo Komplete Komp'd,.	Stewartstown, ...	7.91	4.72	3.75	3.74	2.92	1.60	28 16	23 00	293
13	J. G. Downward & Co., Coatesville, Pa.,	Special Potato Fertilizer,.....	Kelton, ...	12.65	6.38	2.18	1.72	4.75	1.74	30 25	28 00	13
14	" " " "	Ammoniated Bone Phosphate,	Kelton, ...	11.62	7.00	2.60	1.90	2.63	1.21	27 02	25 00	14
106	Eureka Fertilizer Co., Perryville, Md.,....	Alkaline Bone and Potash,...	Quarryville, ...	12.05	7.48	3.85	3.93	1.75	.....	18 61	15 00	106
392	" " " "	Corn and Potato Special,.....	York, ...	6.97	7.06	3.63	4.60	3.17	0.84	28 77	19 00	392
169	Washington Ewing, Landenberg, Pa., ...	Eclipse Raw Bone Phosphate,	Nottingham, ...	7.46	3.99	4.26	3.37	2.24	0.99	24 26	24 00	169
69	W. S. Farmer & Co., Baltimore, Md.,....	Potato Compound,.....	Littlestown, ...	11.04	8.10	2.68	0.99	2.68	1.20	28 33	23 00	69
70	" " " "	Harvest Queen Phosphate,....	Littlestown, ...	11.25	7.48	0.58	3.89	2.42	1.25	25 99	22 00	70
179	" " " "	B. & P. Fertilizer.....	Peach Bottom, ...	6.36	8.17	4 79	0.84	2.08	.....	18 93	13 00	179
208	" " " "	Harvest Queen Phosphate,....	Bridgeton, ...	11.70	7.81	2.56	1.10	3.21	1.15	28 10	23 00	208
218	" " " "	Standard Phosphate,.....	Muddy Creek Forks,	10.77	8.26	2.36	1.17	2.45	1.73	30 44	25 00	218
374	Farmers' Fert. Co., Westminster, Md., ..	XX Bone Phosphate,.....	Dillsburg, ...	9.85	7.32	2.57	1.53	3.20	0.81	26 04	19 00	374
375	" " " "	No. 1 Potato Bone Phosphate,	Dillsburg, ...	5.58	8.12	2.77	1.49	3.91	1.60	31 81	26 00	375
38	Great Eastern Fertilizer Co., New York,	English Wheat Grower,.....	Arendtsville, ...	10.25	8.45	1.61	1.13	2.12	0.88	25 50	21 00	38
39	" " " "	Vegetable, Vine & Tob. Fert.,	Arendtsville, ...	11.82	9.46	1.34	1.05	2.85	2.14	32 94	29 00	39
40	" " " "	General Fertilizer, ...	Arendtsville, ...	10.10	7.59	0.94	0.85	4.66	1.15	27 15	23 00	40
34	Griffith & Boyd. Baltimore, Md., ...	Spring Crop Grower,.....	Fairfield.	10.68	6.40	2.04	1.47	6.78	0.99	29 60	27 00	34
35	" " "	Cereal Bone Plant Food,.....	Fairfield, ...	11.28	5.61	2.80	2.02	2.51	0.89	23 89	22 00	35
67	" " "	Valley Fertilizer,.....	Kingsdale, ...	12.20	7.09	3.03	2.19	1.66	0.47	18 61	18 00	67
174	" " "	Pure Dissolved Animal Bone,	Nottingham.	3.97	8.20	2.78	3.40	.....	1.91	28 77	27 00	174

COMPLETE FERTILIZERS—Continued.

Sample number.	Name and Address of Manufacturer.	Name of Fertilizer.	Where Selected.	Moisture.	Soluble phosphoric acid.	Reverted phosphoric acid.	Insoluble phosphoric acid.	Potash.	Nitrogen.	Comparative commercial value per ton.	Selling price at point of selection per ton.	Sample number.
246	Griffith & Boyd, Baltimore, M. D..	Lebenight's St'd Am. Bone, .	Red Lion.	4.01	5.25	3.64	3.11	4.02	1.13	$27 70	$23 00	246
211	A. M. Grove & Co., Muddy Ck. Forks, Pa.	Special Potato Fertilizer.....	Muddy Creek Forks.	13.06	8.97	2.68	1.02	2.49	0.93	28 47	22 00	211
99	Hanover Bone Fert. Co., Hanover, Pa.,	Farmers' Crop Winner,.....	New Oxford,.....	6.26	1.51	5.96	1.48	1.82	0.46	15 51	18 00	99
100	" " " "	Blood and Bone Compound...	New Oxford,.....	5.54	2.55	5.74	1.76	2.59	0.77	22 65	22 00	100
101	" " " "	Excelsior Combine.....	New Oxford.....	8.17	6.72	2.73	1.74	3.15	1.67	29 26	25 00	101
9	S. M. Hess & Bro., Phila. & Reading, Pa.	Potato and Truck Manure.....	Hamburg, ...	11.57	9.54	1.68	1.38	5.67	2.05	36 26	29 60	9
155	" " " "	Keystone Bone Phosphate.....	Nottingham.	11.00	0.92	8.91	2.16	1.07	1.00	24 13	24 00	155
102	Hubbard & Co., Baltimore, Md.....	Soluble Bone and Potash.....	New Oxford,.....	11.96	8.72	2.12	1.60	2.16	.....	17 66	18 00	102
87	M. P. Hubbard & Co., Baltimore. Md.,	Farmers' Acme Fertilizer.....	Hanover, ...	11.12	6.44	2.10	2.19	2.88	1.55	27 54	25 00	87
229	" " " "	Ammon'ted Bone and Potash.	Felton, ...	7.91	8.20	2.80	1.86	1.45	0.68	25 47	20 00	229
275	" " " "	Farmers' Old Economy,.....	Shrewsbury, ...	6.46	4.51	2.81	2.75	0.94	0.53	19 38	19 00	275
209	T. R. Hubbard & Sons, Chestertown, Md.,	Imperial Compound,.....	Bridgeton, ...	7.52	7.64	2.80	2.52	4.09	0.72	27 80	23 00	209
210	" " " "	Our Peerless Fertilizer.....	Bridgeton, ...	8.32	6.22	2.15	1.24	2.81	0.52	22 02	24 00	210
222	" " " "	Our A. A. Bone Super-Phos..	Laurel, ...	6.11	7.20	2.61	2.86	3.10	1.42	29 13	25 00	222
243	J. W. Kilgore, Brogueville, Pa., ...	Dissolved Bone Phosphate.....	Windsor, ...	7.99	7.27	4.19	2.30	2.25	0.64	26 82	25 00	243
310	J. H. Klinefelter, Glenville, Pa.,.....	Corn, Oats & Potato Grower.	Glenville, ...	4.58	1.03	3.27	1.51	0.52	0.40	13 24	18 00	310
64	George F. Krug, Kingsdale, Pa.,.....	Ammoniated Bone Phosphate,	Kingsdale, ...	6.87	7.01	2.83	3.16	2.01	1.42	28 47	20 00	54

407	Lackaw'a Fert. & Chem. Co., Moosic, Pa.	Bone Super-Phos. for Wh't, &c.	Pleasant Valley,	8.21	7.27	3.35	2.64	2.32	1.84	31 80	30 00	407
409	" " " "	Special Manure for Potatoes, etc.,	Pleasant Valley,	5.25	6.36	2.95	3.27	5.79	2.56	38 01	40 00	409
410	" " " "	Bone Super-Phosphate,	Pleasant Valley,	7.76	7.38	3.28	2.99	2.40	1.63	31 33	30 00	410
95	Lazaretto Guano Co., Baltimore, Md.,	Ammoniated Bone Phosphate.	New Oxford,	14.02	6.69	2.50	1.58	2.76	0.83	24 85	18 00	95
96	" " "	Alkaline Phosphate,	New Oxford,	8.10	7.89	4.20	1.22	2.56	.....	18 85	17 00	96
97	" " " ...	Bone Compound for Wh't, &c.	New Oxford,	10.40	8.62	2.43	1.32	3.25	0.86	27 94	22 00	97
20	Lister's Agr'l Chem. Works, Newark, N.J.,	Celebrated Ground Bone.	Kelton,	4.84	3.61	3.50	7.64	.....	2.88	30 75	25 00	20
21	" " " "	Harvest Queen Phosphate.	Kelton,	12.20	9.22	2.28	2.64	1.30	1.45	29 80	27 00	21
22	" " " "	Animal Bone and Potash.	Kelton,	10.56	8.24	1.38	0.18	5.15	.....	20 19	24 00	22
31	" " " "	Special Potato Fertilizer,	Brandamore,	9.15	7.91	1.90	2.61	4.22	1.76	31 84	22 00	31
55	Maryland Fertilizer Co., Baltimore, Md.,	Linden Super-Phosphate,	Littlestown,	9.07	6.90	4.86	2.49	2.59	.....	19 11	19 00	55
56	" " " "	Ammoniated O. K. Fertilizer,	Littlestown,	10.85	7.27	1.92	1.47	2.38	0.81	24 26	18 00	56
57	" " " "	Alkaline Bone,	Littlestown,	10.70	8.50	3.15	1.96	4.23	.....	20 74	22 00	57
105	" " " "	Globe Complete Manure,	Quarryville,	7.86	5.27	2.66	4.71	1.57	1.64	26 80	25 00	105
4	Robert L. Merwin & Co., New York,	Highly Concent'd Hort. Man.,	Harrisburg,	1.00	9.57	2.20	0.49	25.97	12.22	109 20	120 00	4
216	Miller Fertilizer Co., Baltimore, Md.,	Hustler Phosphate.	Muddy Creek Forks,	9.51	7.59	2.91	1.66	2.43	1.00	27 06	24 00	216
317	" " " "	Amm't'd Diss. Bone Phos.,	Porters' Station,	6.27	6.39	3.01	2.82	2.99	1.95	30 82	24 00	317
368	" " " "	Harvest Queen Phosphate.	Dillsburg,	9.25	6.47	4.38	2.54	2.64	1.12	27 39	26 00	368
369	" " " "	Clermont Phosphate,	Dillsburg,	8.25	7.11	4.07	2.10	2.74	.....	18 64	20 00	369
370	" " " "	Special Potato Fertilizer,	Dillsburg,	5.47	4.69	3.78	1.94	5.50	0.72	26 14	23 00	370
371	" " " "	No. 2 Potato Fertilizer,	Dillsburg,	8.64	5.61	3.48	1.68	4.48	1.45	29 18	28 00	371
400	Mt. Airy Manfg. Co., Baltimore, Md.,	Am. Bone, Grain & Grass Prod.	York,	8.17	8.64	2.25	1.85	2.03	0.88	26 94	18 00	400
259	Niagara Fertilizer Works, Buffalo, N. Y.,	Grain and Grass Grower,	Dallastown,	9.90	5.73	1.99	3.12	1.40	0.88	22 32	23 00	259
260	" " " "	Niagara Triumph,	Dallastown,	10.07	6.61	2.31	3.85	2.53	1.70	29 10	31 00	260
401	Northwestern Fertilizer Co., Chicago, Ill.,	Ammoniated Dissolved Bone,	York,	6.98	6.23	4.70	2.32	1.13	2.51	33 33	25 00	401

COMPLETE FERTILIZERS—Continued.

Sample number.	Name and Address of Manufacturer.	Name of Fertilizer.	Where Selected.	Moisture.	Soluble phosphoric acid.	Reverted phosphoric acid.	Insoluble phosphoric acid.	Potash.	Nitrogen.	Comparative commercial value per ton.	Selling price at point of selection per ton.	Sample number.
402	Northwestern Fertilizer Co., Chicago, Ill.,	Prairie Phosphate,.....	York,.....	6.51	5.27	1.81	6.12	.....	2.51	$27 24	$24 00	402
244	G. Ober & Sons' Co., Baltimore, Md.,....	Farmers' Standard,.....	Red Lion, ...	9.35	9.44	2.91	1.35	1.64	1.56	31 16	24 00	244
245	" " " "	Special Amm. Diss. Bone,....	Red Lion, ...	10.87	8.27	2.50	1.16	2.47	1.41	29 07	22 00	245
24	Packers' Union Fert. Co., New York,....	Wheat, Oats & Clover Fert.,	South Danville,....	10.99	9.28	2.71	1.25	2.66	.....	19 06	20 00	24
136	" " " "	Gardeners' Complete Manure,	Harrisburg, ...	9.36	8.82	0.97	0.57	10.47	2.43	40 83	38 00	136
137	" " " "	Animal Corn Fertilizer,.....	Harrisburg, ...	12.67	8.52	0.98	2.78	2.59	2.51	33 36	30 00	137
138	" " " "	Potato Manure,.....	Harrisburg, ...	10.88	8.79	0.79	1.54	7.36	1.87	35 01	35 00	138
395	Patapsco Guano Co., Baltimore, Md., ...	Coon Brand Guano,.....	York, ...	11.57	6.57	2.32	1.61	3.74	0.77	25 10	20 00	395
396	" " " "	Ammoniated Corn Fertilizer..	York, ...	10.50	7.31	2.37	1.65	2.16	1.15	26 31	21 00	396
397	" " " "	Grange Mixture,.....	York, ...	7.06	7.27	3.09	1.70	2.17	1.52	28 74	23 00	397
398	" " " "	Baltimore Soluble Phosphate,	York, ...	10.91	8.08	4.81	1.00	1.74	.....	18 58	16 00	398
135	Penna. Am'a & Fert. Co., Harrisburg, Pa.	Special Potato Fertilizer.....	Harrisburg, ...	8.10	6.63	3.05	2.13	7.20	1.70	35 28	33 00	135
146	" " " "	Dauphin Brand,.....	Millersburg, ...	10.00	5.71	3.96	1.75	2.39	1.26	26 82	25 00	146
342	Pittsburg Provision Co., Pittsburg, Pa.,	Keystone Fertilizer,.....	Pittsburg.	1.57	3.58	2.70	4.80	2.86	1.55	26 11	26 00	342
343	" " " "	Pure Bone with Potash,.....	Pittsburg.	4.30	8.22	3.01	4.16	3.16	1.79	34 39	32 00	343
344	" " " "	Corn and Potato Fertilizer,...	Pittsburg, ...	3.24	4.81	2.62	7.70	2.81	2.19	31 98	27 00	344
345	" " " "	Guano Fertilizer,.....	Pittsburg, ...	2.66	2.06	4.48	4.15	1.45	1.40	23 42	25 00	345

334	Pittsburg Reduction Co., Pittsburg, Pa....	Pouter Brand,.....	Pittsburg, ...	5.05	4.74	1.07	3.24	1.61	1.65	23 40	25 00	334
62	R. H. Pollock, Baltimore, Md.,.....	Superior Corn & Tom. Fert.,	Biglerville, ...	8.96	4.01	4.34	1.34	3.72	0.97	24 78	25 00	62
250	" " "	Soluble Bone Phosphate,.....	Red Lion, ...	6.26	8.28	4.00	1.37	1.84	.....	18 38	20 00	250
363	" " "	Special Potato and Tobacco,..	Biglerville, ...	2.67	7.36	2.23	1.47	4.35	1.52	30 02	28 00	363
328	Powell Fert. & Chem. Co., Baltimore, Md.	Spring Crop Producer,.....	Pittsburg, ...	9.09	5.42	2.36	2.82	2.36	0.87	23 02	25 00	328
329	" " " "	Red Bag Fertilizer,.....	Pittsburg, ...	9.17	4.71	2.64	3.21	2.49	1.41	25 12	27 00	329
330	" " " "	Potato Producer,.....	Pittsburg, ...	6.25	3.16	1.42	2.76	4.74	1.34	23 19	28 00	330
331	" " " "	Green Bag Fertilizer,.....	Pittsburg.	8.65	4.58	1.38	3.46	6.37	1.77	29 11	32 00	331
73	Ramsburg Fertilizer Co., Frederick, Md.,	Old Virginia Compound,.....	Littlestown.	9 80	5.44	7.31	1.49	0.97	0.97	27 86	23 00	73
74	" " " "	Corn and Potato Fertilizer,..	Littlestown, ...	9.30	2.71	5.63	4.39	1.63	0.95	23 98	23 00	74
367	" " " "	Excelsior Plant Food,.....	Bendersville, ...	5.52	6.70	4.01	3.77	0.89	2.16	31 68	25 00	367
37	The Rasin Fertilizer Co., Baltimore, Md..	Bone and Potash,.....	McKnightstown.....	11.54	6.15	6.65	1.66	1.03	.....	17 83	14 00	37
75	" " " "	Dissolved Bone,.....	Littlestown, ...	8.82	7.53	2.37	3.47	.....	2.20	29 80	24 00	75
77	" " " "	Empire Guano,.....	Littlestown.	10.46	7.25	2.42	2.48	1.83	2.12	30 54	24 00	77
287	John S. Reese & Co., Baltimore, Md.....	Mayflower Brand,.....	Stewartstown, ...	8.62	1.15	7.82	2.96	3.05	1.40	27 36	24 00	287
290	" " " "	Special Alkaline Phosphate...	Stewartstown, ...	6.67	8.92	3.05	1.55	1.10	.....	17 44	18 50	290
285	" " " "	Crown Phosphate and Potash.	Stewartstown, ...	8.37	9.94	3.31	0.89	1.85	.....	19 16	16 00	285
288	" " " "	Half and Half Brand.....	Stewartstown.	10.35	0.94	8.17	2.45	1.33	1.05	23 84	21 50	288
289	" " " "	Pilgrim Fertilizer.....	Stewartstown, ...	8.65	1.00	6.37	3.84	2.68	1.25	24 55	25 00	289
200	Henry Reckord Mfg. Co., Bel-Air, Md.,	Animal Bone Phosphate,.....	Woodbine, ...	11.23	7.64	1.99	1.12	2.94	0.85	25 56	23 00	200
204	" " " "	Special Compound.....	Woodbine, ...	11.80	8.11	2.19	1.21	2.22	1.56	28 81	26 00	304
10	Reading Chem. & Fert. Co., Reading, Pa.,	Quick Brand Fertilizer,.....	Hamburg.	12.36	5.64	2.68	1.56	1.82	0.50	21 01	20 00	10
358	Scientific Fertilizer Co., Pittsburg. Pa.,	Vegetable Fertilizer,.....	Pittsburg.	8.74	6.06	1.72	2.20	5.70	4.13	41 07	30 00	358
359	" " " "	Potato Fertilizer.....	Pittsburg, ...	6.70	4.74	1.71	1.78	7.75	3.94	41 92	34 00	359
109	Scott Fertilizer Co., Elkton, Md.,.....	Standard Phosphate,.....	Quarryville, ...	8 77	6 01	3.01	2.37	2.31	1.25	26 21	23 00	109

COMPLETE FERTILIZERS—Continued.

Sample number.	Name and Address of Manufacturer.	Name of Fertilizer.	Where Selected.	Moisture.	Soluble phosphoric acid.	Reverted phosphoric acid.	Insoluble phosphoric acid.	Potash.	Nitrogen.	Comparative commercial value per ton.	Selling price at point of selection per ton.	Sample number.
119	Scott Fertilizer Co., Elkton, Md., ...	No. 2 Potato Fertilizer,.....	Quarryville, ...	7.37	5.16	3.07	3.42	4.58	1.88	$30 94	$25 00	119
281	Seitz & Neller, Stewartstown, Pa.,.....	Special Compound,.....	Stewartstown, ...	9.66	5.16	3.81	3.00	1.84	0.85	24 06	20 00	281
282	" " "	Prolific Phosphate.....	Stewartstown, ...	7.65	6.22	4.04	3.41	2.68	1.60	30 33	23 00	282
142	Sharpless & Carpenter, Philadelphia, Pa.,	Soluble Bone and Potash,.....	Atglen, ...	6.92	1.83	8.86	4.19	2.13	.....	23 10	14 00	142
144	" " " "	Gilt Edge Potato Manure,.....	Atglen, ...	7.43	5.18	2.04	2.52	7.16	2.62	35 07	28 00	144
276	G. W. Sharretts & Co., Baltimore, Md.,	Corn Guano, ...	Turnpike, ...	5.85	3.71	2.69	1.56	1.55	0.71	18 82	24 00	276
277	" " " "	Ammoniated Bone, ...	Turnpike, ...	6.18	1.09	4.81	1.67	0.79	0.57	16 42	20 00	277
278	" " " "	Fish, Rock and Potash,.....	Turnpike, ...	6.42	0.27	2.76	1.05	1.11	0.36	11 72	17 00	278
18	M. L. Shoemaker & Co., Philadelphia, Pa.	Muriate of Potash, ...	Kelton.	5.76	.....	.....	.....	42.40	.....	48 99	45 00	18
19	" " " "	Kainit, ...	Kelton.	7.92	.....	.....	.....	12.42	.....	16 39	13 00	19
60	Slingluff & Co., Baltimore, Md.,.....	Special Bone Phosphate,.....	Littlestown.	9.90	11.01	2.56	1.57	.....	0.72	27 54	18 00	60
265	" " "	Corn and Oats Fertilizer,.....	Glen Rock, ...	10.57	7.30	2.96	0.84	2.35	.....	16 84	18 00	265
266	" " "	Universal Guano, ...	Glen Rock, ...	8.09	7.81	2.32	2.13	4.83	1.77	32 72	22 00	266
291	" " "	Ammoniated Bone, ...	Stewartstown, ...	7.52	7.22	3.05	2.46	2.80	2.14	32 62	22 00	291
307	H. S. Stick, Glenville, Pa.,.....	York County Phosphate,.....	Glenville, ...	8.91	5.45	3.94	3.42	1.83	1.34	27 10	24 00	307
309	" " "	Manheim Brand, ...	Glenville, ...	11.16	8.69	3.04	1.44	1.33	0.33	19 02	19 00	309
45	Susquehanna Fert. Co., Baltimore, Md.,	Ammoniated Bone Phosphate,	Gettysburg, ...	12.02	7.73	3.31	1.77	2.59	1.65	30 90	25 00	45

47	" " " "	Alkaline Bone Phosphate,.....	Gettysburg, ...	11.86	5.83	4.53	2.43	2.09	.....	17 26	15 50	47
118	" " " "	Potato Phosphate,.....	Quarryville.	9.01	7 67	3.01	2.34	4.26	1.34	31 10	26 00	118
360	I. P. Thomas & Son Co., Philadelphia, Pa.,	Alkaline Bone, ...	Biglerville, ...	7.11	7.32	4.25	2.93	1.55	.....	18 08	16 00	360
362	" " " "	Improved Super-Phosphate,..	Biglerville, ...	5.36	7.83	3.24	1.58	1.24	0.90	26 23	22 00	362
383	Tygert-Allen Fert. Co., Philadelphia, Pa.,	Star Bone Phosphate,.....	Mount Wolf.	5.22	7.71	2.51	2.91	2.95	2.07	32 55	29 00	383
192	Joshua Walker, Baltimore, Md.,.....	Victoria Bone, ...	Castle Fin, ...	11.00	4.89	7.16	2.12	1.13	.....	17 37	15 00	192
350	Walker, Stratman & Co., Pittsburg, Pa.,.	Smoky City Brand,.....	Pittsburg, ...	5.12	10.23	2.99	2.16	1.21	1.37	31 74	30 00	350
353	" " " "	Four Fold Fertilizer.....	Pittsburg.	6.97	6.90	3.45	2.18	1.09	1.39	27 52	27 00	353
130	Robert A. Wooldridge & Co., Baltimore, Md.	Little Giant A. A. Phosphate,	Lititz.	9.75	7.24	2.24	1.09	2.35	0.91	24 86	24 00	130
201	" " " "	Chieftain Ammoniated Phos..	Woodbine.	10.86	6.40	2.49	1.44	1.82	1.36	25 56	23 00	201
214	" " " "	Triumph Bone Phosphate.....	Muddy Creek Forks,	8.67	5.74	2.59	1.35	3.53	1.24	26 16	25 00	214
385	G. H. Wolf's Sons, Mt. Wolf, Pa., ...	Special Wheat & Grass Gro'r.	Mount Wolf.	7.35	7.22	3.28	2.73	1.82	0.84	26 17	19 00	385
25	The Zell Guano Co., Baltimore, Md.....	Calvert Guano.	Sunbury.	10.17	9.24	2.51	1.70	1.77	1.11	28 62	23 00	25

GROUND BONE.

Containing Phosphoric Acid and Nitrogen.

Samples Selected from January 1, 1896, to August 1, 1896.

Sample number.	Name and Address of Manufacturer.	Name of Fertilizer.	Where Selected.	Moisture.	Insoluble phosphoric acid.	Nitrogen.	Comparative commercial value per ton.	Selling price at point of selection per ton.	Sample number.
340	Allegheny City Fert. W'ks. Allegheny, Pa.	Pure Raw Bone Meal, ...	Allegheny.	6.68	23.14	3.85	$33 07	$30 00	340
294	A. Anstine. Stewartstown. Pa., ...	Pure Ground Bone, ...	Stewartstown.	6.46	19.96	3.88	29 68	29 00	294
325	Armour Fertilizer Works. Chicago, Ill., ...	Raw Bone Meal.	Pittsburg, ...	5.62	25.27	3.50	33 50	35 00	325
372	Baltimore Guano Co., Baltimore. Md., ..	Raw Bone, ...	Dillsburg, ...	6.72	25.52	2.82	31 93	28 00	372
127	The Berg Co.. Philadelphia, Pa., ...	Raw Bone, Fine.	Lancaster.	6.18	18.23	3.43	28 63	30 00	127
399	C. H. Dempwolf & Co., York, Pa., ...	Raw Bone, ...	York.	5.47	22.45	3.82	35 40	29 00	399
273	Detrick Fert. & Chemical Co., Balt., Md.,	Pure Fine Ground Bone.	Railroad, ...	3.07	22.16	3.73	32 65	30 00	273
12	J. G. Downward & Co., Coatesville, Pa.,..	Pure Ground Bone, ...	Kelton.	8.05	21.70	3.06	29 89	30 00	12
6	Eureka Fertilizer Co., Perryville, Md.,...	Raw Bone, ...	Chatham, ...	4.40	21.84	3.57	32 88	30 00	6
172	Griffith & Boyd. Baltimore, Md., ...	Fine Ground Bone Meal.	Nottingham, ...	4.35	23.14	3.08	30 74	28 00	172
93	Hanover Bone Fert. Co., Hanover, Pa., ..	Pure Bone, ...	Hanover, ...	3.58	15.28	3.34	27 27	27 00	93
156	S. M. Hess & Bro., Phila. & Reading, Pa.	Ground Bone, ...	Nottingham, ...	3.76	26.22	2.95	35 36	28 00	156
408	Lackaw'a Fert. & Chem. Co., Moosic, Pa.,	Pure Ground Bone, ...	Pleasant Valley.	5.59	24.96	3.35	35 37	35 00	408
347	Pittsburg Provision Co.. Pittsburg, Pa..	Pure Raw Bone Meal No. 1...	Pittsburg.	4.46	25.78	3.08	35 31	33 00	347

349	" " " "	Crescent Butchers' G'd Bone,	Pittsburg,	4.10	21.18	3.48	33 37	29 00	349
115	Scott Fert. Co., Elkton, Md.,	Pure Ground Bone,	Quarryville,	7.22	23.53	3.93	33 91	28 00	115
145	Sharpless & Carpenter, Phila., Pa.,	Bone Meal,	Atglen,	7.46	24.16	4.06	36 85	28 00	145
17	M. L. Shoemaker & Co., Phila., Pa.,	Pure Raw Bone Meal,	Kelton,	5.70	23.72	4.13	37 41	28 00	17
167	Swift & Co., Chicago, Ill,	Ground Steamed Bone,	Nottingham,	2.90	27.56	2.47	36 72	25 00	167
355	Walker, Stratman & Co, Pittsburg, Pa.,	Bone and Meat,	Pittsburg,	4.05	17.15	3.76	28 72	25 00	355
356	" " " "	Pure Raw Bone,	Pittsburg,	4.72	23.89	2.47	31.34	29 00	356
357	" " " "	Butchers' Bone Meal,	Pittsburg,	3.78	17.32	2.90	27 78	28 00	357
404	York Chemical Works, York, Pa.,	Ground Bone,	Harrisburg,	4.62	17.12	2.65	26 91	30 00	404

ACIDULATED SOUTH CAROLINA ROCK.

Containing Phosphoric Acid Only.

Samples Selected from January 1, 1896, to August 1, 1896.

Sample number.	Name and Address of Manufacturer.	Name of Fertilizer.	Where Selected.	Moisture.	Soluble phosphoric acid.	Reverted phosphoric acid.	Insoluble phosphoric acid.	Total phosphoric acid.	Comparative commercial value per ton.	Selling price at point of selection per ton.	Sample number.
187	Baugh & Sons Co., Philadelphia, Pa.,	High Grade Acid Phosphate.	South Delta,	6.65	11.92	2.97	2.38	17.27	$18 26	$12 00	187
139	U. & A. C. Blackburn, Fishertown, Pa.,	Super-Phosphate (S. C. Rock).	Fishertown,	6.97	12.76	3.00	1.10	16.86	18 49	14 00	139
91	A. R. Brodbeck, Hanover, Pa.	Soluble Bone,	Hanover,	7.71	9.91	4.11	2.78	16.80	17 49	15 50	91

SOUTH CAROLINA ROCK—Continued.

Sample number.	Name and Address of Manufacturer.	Name of Fertilizer.	Where Selected.	Moisture.	Soluble phosphoric acid.	Reverted phosphoric acid.	Insoluble phosphoric acid.	Total phosphoric acid.	Comparative commercial value per ton.	Selling price at point of selection per ton.	Sample number.
83	S. B. Brodbeck, Brodbeck, Pa., ...	Ruth's Dissolved Bone, ...	Hanover, ...	11.05	14.06	2.91	0.34	17.31	19 29	13 00	83
312	" " "	Farmers' Diss'd S. C. Bone, .	Jefferson, ...	9.30	11.37	3.63	1.51	16.51	17 89	13 00	312
306	Brumfield & Foster, Colora, Md., ...	High Grade Acid Phosphate,..	New Freedom, ...	6.20	12.07	3.66	1.04	16.77	18 34	13 00	306
58	Chemical Co. of Canton, Baltimore, Md.,..	Pure Dissolved S. C. Bone,...	Littlestown, ...	9.53	10.64	3.73	1.52	15.89	17 30	13 00	58
146	Henry Cope & Co., Lincoln University, Pa.,	Acid Phosphate, ...	Nottingham, ...	8.40	8.08	4.96	3.46	16.50	16 80	12 00	164
80	E. A. Clendennin & Bro., Colora, Md., ..	High Grade Acid Phosphate...	Hanover, ...	10.17	11.83	3.23	0.93	15.99	17 74	14 00	80
23	J. A. Cranston Co., Newport, Del., ...	Horse Shoe Soluble Bone, ...	Kelton, ...	10.48	11.64	2.44	2.04	16.12	17 43	12 50	23
252	Crocker Fert. & Chem. Co., Buffalo, N. Y.,	Niagara Phosphate, ...	Red Lion, ...	5.50	10.46	3.43	3.24	17.13	17 70	20 00	252
247	Detrick Fert. & Chem. Co., Baltimore, Md.,	Dissolved S. C. Bone,.....	Red Lion, ...	7.40	13.79	2.77	0.42	16.98	18 99	14 00	247
15	J. G. Downward & Co., Coatesville, Pa.,...	Acid Phosphate, ...	Kelton, ...	8.91	10.94	2.18	3.52	16.64	17 24	15 00	15
5	Eureka Fertilizer Co., Perryville, Md., ...	Dissolved S. C. Rock, ...	Chatham, ...	11.14	10.84	2.98	3.28	17.10	17 70	14 00	5
16	" " "	P. & P. Super Phosphate, ...	Kelton, ...	10.65	11.02	2.97	3.45	17.44	17 90	12 00	16
68	W. S. Farmer & Co., Baltimore, Md.....	Dissolved S. C. Bone, ...	Littlestown, ...	7.02	12.31	3.60	0.91	16.82	18 46	13 50	68
66	Griffith & Boyd, Baltimore, Md., ...	High Grade Acid Phosphate,..	Kingsdale, ...	10.37	9.81	3.62	2.22	15.65	16 74	14 00	66
11	Great Eastern Fert. Co., New York., ...	Dissolved Bone Fertilizer, ...	Hamburg, ...	10.75	12.03	2.22	1.58	15.83	17 38	15 00	11
133	S. M. Hess & Bro., Phila. & Reading, Pa	High Grade Acid Phosphate,..	Quarryville, ...	8.22	12.43	3.06	0.83	16.32	18 10	13 00	133
84	M. P. Hubbard & Co., Baltimore, Md.....	High Grade Sol. S. C. Phos.,	Hanover, ...	9.97	8.42	5.39	1.98	15.79	16 76	12 50	84

121	Hubbard & Co., Baltimore, Md., ...	Soluble S. C. Phosphate, ...	Quarryville, ...	7.46	11.19	3.66	2.36	17.21	18 15	13 00	121
65	George F. Krug, Kingsdale, Pa., ...	XX Acid Phosphate, ...	Kingsdale, ...	10.05	9.01	4.17	1.62	14.80	16 14	14 00	65
98	Lazaretto Guano Co., Baltimore, Md., ...	Pure Dissolved S. C. Bone,...	New Oxford, ...	9.97	9.65	4.56	1.96	16.17	17 23	15 00	98
54	Maryland Fertilizing Co., Baltimore, Md.,	Dissolved S. C. Rock, ...	Littlestown, ...	8.47	9.82	6.57	0.88	17.27	18 55	13 00	54
197	Miller Fertilizer Co., Baltimore, Md., ...	Dissolved S. C. Bone, ...	Castle Fin, ...	9.92	12.02	2.73	1.75	16.50	17 88	12 50	197
160	Monumental Chemical Co., Baltimore, Md..	Acid Phosphate, ...	Nottingham, ...	9.55	13.36	3.29	1.35	18.00	19 44	12 00	160
313	H. H. Myers, Codorus, Pa., ...	Soluble Bone, ...	Cold Spring, ...	6.13	13.37	2.90	0.56	16.83	18 76	16 00	313
378	Natural Plant Food Co., Washington, D. C.	Natural Plant Food, ...	Rossville, ...	2.61	0.37	1.28	21.69	23.34	15 04	13 00	378
117	Moro Phillips Chemical Co., Phila., Pa.,...	Dissolved Phosphate, ...	Quarryville, ...	9.20	8.57	5.05	1.30	14.92	16 28	14 00	117
346	Pittsburg Provision Co., Pittsburg, Pa.,...	Acid Phosphate, ...	Pittsburg, ...	8.20	11.70	3.10	1.23	16.03	17 64	19 00	346
63	R. H. Pollock, Baltimore, Md., ...	Dissolved S. C. Bone, ...	Biglerville.	9.14	10.23	5.09	1.27	16.59	17 92	14 00	63
76	The Rasin Fertilizer Co., Baltimore, Md.,	Acid Phosphate, ...	Littlestown.	8.82	12.53	4.28	0.37	17.18	19 03	13 50	76
286	John S. Reese & Co., Baltimore, Md., ...	Dissolved Phosphate of Lime.	Stewartstown, ...	5.25	12.71	3.79	1.03	17.53	19 09	12 00	286
110	Scott Fertilizer Co., Elkton, Md., ...	Tip Top Soluble Bone, ...	Quarryville, ...	6.47	10.24	4.28	2.64	17.16	17 89	13 00	110
143	Sharpless & Carpenter, Philadelphia, Pa..	Dissolved S. C. Phosphate....	Atglen, ...	8.00	12.48	2.12	1.90	16.50	17 88	11 25	143
61	Slingluff & Co., Baltimore, Md., ...	Dissolved S. C. Bone, ...	Littlestown, ...	11.98	10.74	3.64	0.47	14.85	16 81	14 00	61
308	H. S. Stick, Glenville, Pa., ...	Dissolved S. C. Bone, ...	Glenville.	6.29	12.15	2.66	1.78	16.59	17 96	12 00	308
44	Susquehanna Fertilizer Co., Baltimore, Md.	Superior Rock Phosphate, ...	Gettysburg.	5.27	12.20	3.33	2.28	17.81	18 81	13 00	44
377	" " " "	Soluble Bone Phosphate, ...	Dillsburg, ...	3.10	12.47	3.16	2.22	17.85	18 91	17 00	377
361	I. P. Thomas & Son Co., Phila., Pa., ...	South Carolina Phosphate, ..	Biglerville, ...	2.91	8.99	5.53	3.24	17.76	18 04	14 00	361
403	" " "	High Grade Dissolved Rock,	West Chester, ...	9.80	14.48	3.55	0.44	18.47	22 00	16 50	403
193	Joshua Walker. Baltimore, Md., ...	Dissolved S. C. Phosphate. ...	Castle Fin.	10.78	13.54	2.72	0.41	16.67	18 67	14 00	193
104	W. E. Whann, Spring Mill, Pa., ...	South Carolina Phosphate, ...	May, ...	8.78	11.22	2.53	2.87	16.62	17 47	12 00	104
132	Williams & Clark Fertilizer Co., N. Y.,...	Acorn Brand Acid Phosphate,	Quarryville.	9.07	11.08	3.77	3.00	17.85	18 45	13 00	132
26	The Zell Guano Co., Baltimore, Md., ...	Dissolved Bone Phosphate, ...	Sunbury, ...	8.32	12.48	2.35	1.78	16.61	18 02	15 00	26

SPECIAL NOTICE.

The attention of manufacturers and agents is hereby called to the fact that all licenses for the manufacture and sale of Commercial Fertilizers expire December 31st, 1896, and in order to protect agents and others selling, or offering these goods for sale, all licenses should be promptly renewed. It is the duty of agents to know that the fertilizers which they sell or offer for sale are properly licensed, for they, with the manufacturers, are personally liable for offering or selling unlicensed goods; one half of the penalty goes to the informer.